

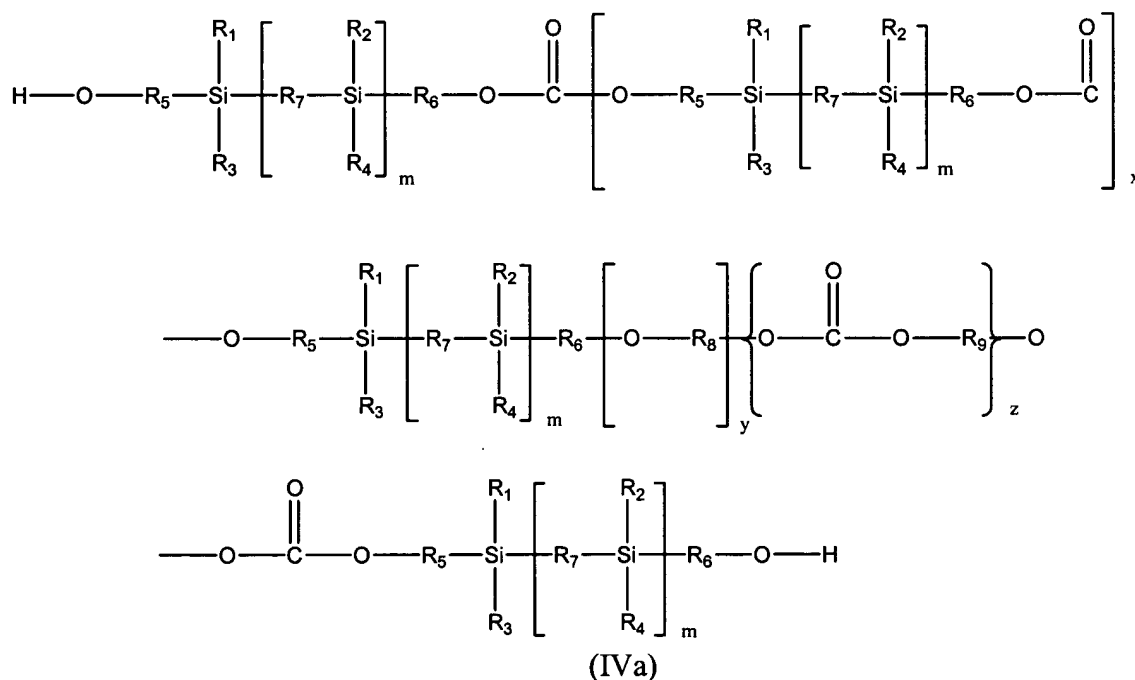
### IN THE CLAIMS

Please amend the claims as follows.

Claims 1-94 (Canceled)

95. (Previously Presented) A shape memory polyurethane or polyurethane-urea polymer according to claim 153, wherein z is an integer of 0 to about 50, x is an integer of 1 to about 50, m is an integer of 0 to about 20 and y is an integer of 0 to about 10.

96. (Previously Presented) A shape memory polyurethane or polyurethane-urea polymer according to claim 153, wherein the silicon-based polycarbonate is a compound of the formula (IV) wherein the endcapping group is a hydroxy which is a polycarbonate macrodiol of the formula (IVa):

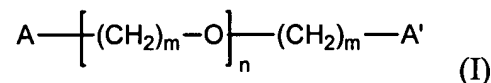


97. (Previously Presented) A shape memory polyurethane or polyurethane-urea polymer according to claim 96, wherein the polycarbonate macrodiol is a compound of the formula (IVa) wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are methyl, R<sub>8</sub> is ethyl, R<sub>9</sub> is hexyl, R<sub>5</sub> and R<sub>6</sub> are propyl or butyl and R<sub>7</sub> is O or -CH<sub>2</sub>-CH<sub>2</sub>-.

98. (Previously Presented) A shape memory polyurethane or polyurethane-urea polymer according to claim 97 wherein R<sub>5</sub> and R<sub>6</sub> are propyl when R<sub>7</sub> is O and R<sub>5</sub> and R<sub>6</sub> are butyl when R<sub>7</sub> is -CH<sub>2</sub>-CH<sub>2</sub>-.

Claims 99-152 (Canceled)

153. (Currently Amended) A biostable shape memory polyurethane or polyurethane-urea polymer according to claim 83, comprising a reaction product of (a), (b) and (c) as set out under (A) below, or a reaction product of (b), (c) and (d) as set out under (B) below:  
(A) (a) a silicon-based macrodiol and a polyether of formula (I) below; a silicon-based macrodiamine and a polyether of formula (I) below; or a silicon-based macrodiol, a silicon-based macrodiamine and a polyether of formula (I):



wherein

A and A' are endcapping groups;

m is an integer of 6 or more; and

n is an integer of 1 or greater,

(b) a diisocyanate; and

(c) a chain extender,

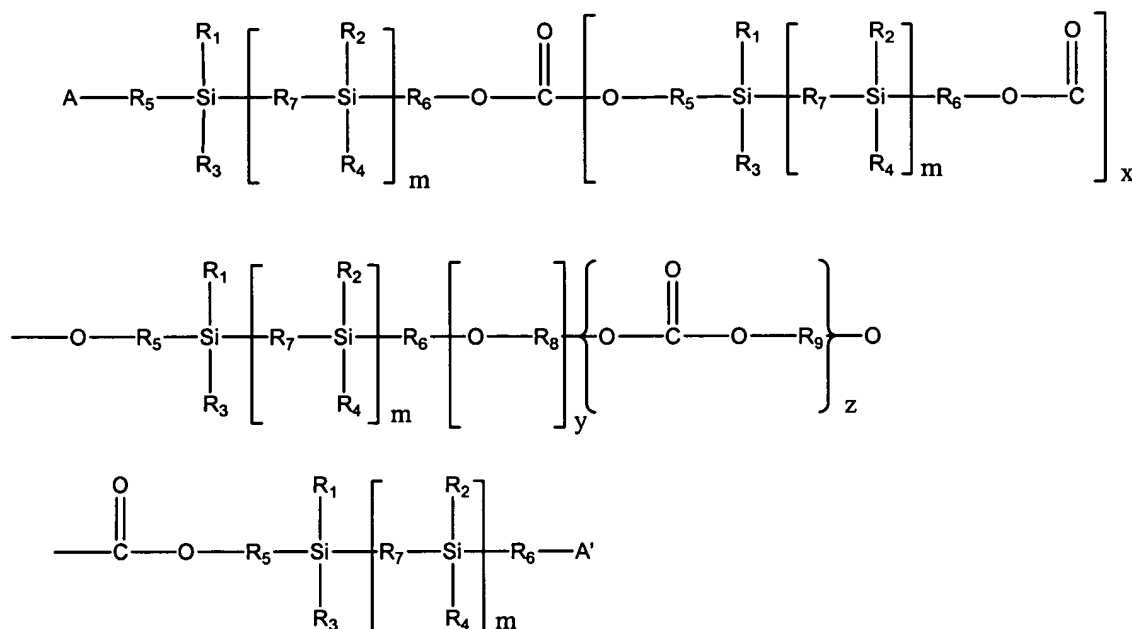
(B) (b) a diisocyanate;

(c) 60% by weight of a diol or diamine chain extender based on the total weight of chain extender; and

(d) 40% by weight of a silicon-containing chain extender based on the total weight of chain extender,

wherein the molecular weight range of the silicon-based macrodiol, silicon-based macrodiamine or polyether of formula (I) in component (a) is 300 to 700; and

wherein the silicon-based macrodiol is a silicon-based polycarbonate ~~has~~ having the formula (IV):



wherein:

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are the same or different and selected from hydrogen or an optionally substituted straight chain, branched chain and cyclic, saturated or unsaturated hydrocarbon radical;

R<sub>5</sub>, R<sub>6</sub>, R<sub>8</sub> and R<sub>9</sub> are the same or different and selected from an optionally substituted straight chain, branched chain and cyclic, saturated or unsaturated divalent hydrocarbon radical;

R<sub>7</sub> is a divalent linking group or an optionally substituted straight chain, branched chain or cyclic, saturated or unsaturated hydrocarbon radical;

m, y and z are integers of 0 or more; and

x is an integer of 0 or more

said polymer having a glass transition temperature which enables the polymer to be transformed from its original shape into a first shape at a temperature higher than the glass transition temperature and maintained in said first shape when the polymer is cooled to a temperature lower than the glass transition temperature, said polymer then being capable of resuming its original shape on heating to a temperature higher than the glass transition temperature.